



National Nuclear Security Administration



Washington, DC 20585



May 2004

Secretary Launches Security Initiatives

Secretary of Energy Spencer Abraham has announced a set of sweeping security initiatives to improve security across the Energy Department's nationwide network of laboratories and defense facilities, particularly those housing weapons-grade nuclear material.

At a gathering of top security officers from across the DOE complex, Abraham said DOE and its National Nuclear Security Administration are responsible for protecting critical national defense assets that "simply put, must not be allowed to fall into the wrong hands."

The Secretary unveiled initiatives to expand the capabilities of DOE security personnel, including possibly

federalizing some security units currently managed by contractors; consolidate sensitive nuclear material into fewer locations; enhance protections of classified computer information; upgrade security systems at key facilities; and make managers more receptive to security concerns.

"Since the stakes are so high," Abraham told the security officers meeting at DOE's Savannah River Site, "everything is on the table," including the possibilities of common labor-contract language for security groups across the DOE complex or establishing "a special elite federal force" to protect the most sensitive installations.

To maximize the effectiveness of DOE security forces, Abraham said he will consider the creation of a specialized security contingent to guard the department's high-priority nuclear facilities, with capabilities similar to the military's Delta Force or Navy SEAL units.

In a move to reduce the number of nuclear facilities that need high-level protection, Abraham proposed consolidating special nuclear material - the type used for weapons and other sensitive applications - into fewer sites.

The consolidation effort

(continued on page 2)



Abraham Dedicates New Sandia Facility

Secretary of Energy Spencer Abraham (right) participates in a news conference with Sandia National Laboratories Director C. Paul Robinson outside the new Sandia Joint Computational Engineering Laboratory (JCEL). Abraham dedicated the facility during a visit to Albuquerque.

The primary mission of JCEL is to develop advanced science-based Stockpile Stewardship tools to support Sandia's national security missions.

The new 61,180 square-foot, three-story building is the first major structure in Sandia's MESA (Microsystems and Engineering Sciences Applications) project.

Security Initiatives

(continued from page 1)

would remove the most sensitive nuclear material from Los Alamos National Laboratory's Technical Area 18 and the Sandia National Laboratories Pulse Reactor facility in New Mexico, consolidate material stored at the Y-12 National Security Complex in Tennessee, and assess whether defense-related work at Lawrence Livermore National Laboratory in California could be relocated, allowing removal of special nuclear material from that facility.

To improve the protection of sensitive information, Abraham

announced a Cyber Security Enhancement Initiative to help "protect the confidentiality, integrity and availability of all our information systems to assure that we can continue to perform our missions even while under cyber attack." The initiative, to be implemented within the next year, would deploy intrusion-detection systems to guard against potential cyber attacks, improve procedures to guard against Internet threats and enhance the security of on-line information.

Citing past problems with computer disks and hard drives

containing classified information, Abraham proposed "an initiative to move to diskless workstations for classified computing" to allow sensitive functions such as weapons design to be performed in a more-secure diskless environment.

Concerning lost keys and key cards, Abraham said he intends to "do away with the use of mechanical keys as an important part of our protection system" and replace them with sophisticated new technologies that will allow "a keyless security environment, where access is not afforded by any physical item or object that can be lost or stolen."

New Fusion Program Oversight Manager Proposed

The intention to create a new senior-level manager position to oversee the Inertial Confinement Fusion Program (ICFP) and the construction and activation of the National Ignition Facility (NIF) has been announced by NNSA Deputy Administrator Everet Beckner.

Dr. Christopher J. Keane, currently director of the division of secondaries and inertial fusion, has been assigned the task of defining the new organization and consolidating the management team for inertial fusion and the NIF project. Keane has been at NNSA since 1996, and director of the division of secondaries and inertial fusion since 2000.

The move consolidates the NIF Project Office and the ICFP under an assistant deputy administrator for inertial fusion and the NIF project, who will report directly to Beckner. NIF construction had previously been organized in the deputy administrator's immediate office and the ICFP had been placed in the

Office of Research, Development and Simulation.

"This is the right time to make a move," Beckner said. "Although NIF is not yet complete, construction has proceeded far enough for us to begin stockpile stewardship experiments later this year. The reorganization will help ensure that a senior manager has direct responsibility for NIF construction as well as coordination of the project with the Stockpile Stewardship Program."

In addition to NIF, the new office will oversee the other components of the Inertial Confinement Fusion and High Yield Campaign, including the OMEGA laser at the University of Rochester and the Z machine at

Sandia National Laboratories.

When completed in 2008, NIF will be the world's largest and highest

NNSA has set a central goal of achieving inertial confinement fusion ignition with energy gain at NIF in 2010. This is a major scientific milestone.

energy laser system, and a key component of NNSA's Office of Defense Programs Stockpile Stewardship Program. Ignition, which has never occurred other than in the stars of the

universe or in exploding nuclear devices, will provide researchers with a better understanding of the processes that occur in nuclear weapons and valuable data for future fusion energy production.

The Stockpile Stewardship Program is responsible for ensuring the safety, security and reliability of the United States nuclear weapons stockpile without nuclear testing.

Brooks Names Arkin and Wilmot as New Managers for Savannah River and Los Alamos Site Offices

Administrator Linton F. Brooks has named two new managers for NNSA site offices. Rick Arkin is the new manager of the Savannah River Site Office in South Carolina and Ed Wilmot is manager of the Los Alamos Site Office in New Mexico.

The Savannah River office is responsible for managing all NNSA defense programs activities at the Savannah River Site. The Los Alamos Site Office oversees the Los Alamos National Laboratory. Arkin succeeds Wilmot at Savannah River and Wilmot succeeds Ralph Erickson, who is retiring.

“We are pleased to have Ed Wilmot take over the reigns at Los

Site Office. Before Savannah River, he was deputy assistant deputy administrator for military applications and stockpile operations in Washington, DC. A long-time Department of Energy (DOE)



MANAGER TOURS FACILITY: Bobby Smith (left) of WSRC and Roger Yancey (center) of BSRI show Rick Arkin (right), NNSA Savannah River Site Office manager, one of the new glove boxes installed in the Tritium Extraction Facility.



NEW LASO MANAGER: Ed Wilmot, new Los Alamos Site Office manager.

Alamos. His program knowledge, technical expertise and commitment to excellence will continue to be of great benefit to this organization,” Brooks said.

Since December 2003, Wilmot has managed NNSA’s Savannah River

employee, he has also served at DOE headquarters in Washington DC, DOE’s Idaho Operations Office and Sandia National Laboratories. In 2002, he was awarded the President’s Award for Distinguished Service to the United States.

He holds a bachelor’s degree in ceramic engineering and a master’s degree in ceramic and nuclear engineering from the University of Washington.

Since January 2001, Arkin has been deputy director of NNSA’s emergency operations office, serving as acting director from April 2002 to

January 2004. Previously, he managed the Albuquerque Operations Office of Emergency Response program. From 1992 to 1997, he was deputy director of the DOE’s Transportation Safeguards System.

“Rick has made major contributions to the overall success for our emergency operations program and to homeland security,” said Brooks. “In the aftermath of September 11, 2001, he has worked tirelessly to manage and direct our emergency management operations in support of federal, state and local agencies,” Brooks said.

Arkin holds a bachelor’s degree in urban planning from the University of Maryland and a master’s degree in business administration from Frostburg State University in Maryland.

New Sandian Works With Rural Communities in Mexico and Central America on Sustainable Energy Projects

Day-to-day technical tasks of Sandia National Laboratories staff members normally don't involve the need to hike up narrow mountain trails in Central America. But for Debora Ley, that sort of working environment has been the norm in her first one-and-a-half years on the job.



ISEG MEMBER: Sandian Debora Ley and an ISEG member take a break while climbing to Waxabajá, in Guatemala.

Debora is assigned to Sandia's International Sustainable Engineering Group (ISEG). She is part of a team that works mainly in Mexico and Central and South America. The program has provided sustainable energy for applications such as televised education, agriculture, protected-areas management and electrification. The goal is to increase the quality of life for the various communities.

Sandia, like the other NNSA weapons labs, has a primary mission to ensure that the U.S. nuclear arsenal is safe, secure, reliable and can fully support the nation's deterrence policy. Since the early 1970s, Sandia has also applied the system analysis, technology development and engineering design

expertise derived from the nuclear weapons program to advance energy technology needs.

DOE and the US Agency for International Development are sponsors of the ISEG work. "They make it possible to provide

sustainable energy resources to people who really need and appreciate it," said Margie Tatro, director of Sandia's Energy Infrastructure and Knowledge Systems Center.

In Guatemala's protected areas, for example, ISEG is trying to combine conservation and development. Reaching Waxabajá, in the

Biosphere Reserve of Sierra de las Minas, was quite an adventure for Debora. From Guatemala City, it is about a three-hour drive to the nearest hotel. From there, it is another two-hour drive, followed by a four-hour hike up and down and around mountains. Parts of the trail are very steep and treacherous, even ledge-like. "It is from about two feet wide to parts where you have to put one foot in front of another and don't look down. As treacherous as some parts are, there are parts that are beautiful — waterfalls, wild flowers and lush green vegetation," said Debora.

The Pocomchi residents of the

NNSA To Implement Security Workforce Study Suggestions

A comprehensive plan to address implementing recommendations of an expert panel that examined policies to recruit and retain experienced security personnel across the nation's nuclear weapons complex has been announced by Administrator Linton F. Brooks.

The recommendations are contained in the recently issued report, "Strengthening NNSA Security Expertise: An Independent Analysis." The report was prepared by the Security Workforce Panel led by retired Admiral Hank Chiles at the request of Brooks last July, as one of several initiatives to address concerns raised by a series of security incidents.

The Security Workforce Team was charged with developing recommendations for recruiting and retaining NNSA officials who have the technical, engineering and physical sciences expertise needed for effective, long-term oversight of safeguards and security operations in the nuclear weapons complex. The report, issued in March 2004, makes the following recommendations:

- Develop and execute a comprehensive human capital management program.
- Improve the training, qualifications and stature of the NNSA security workforce.
- Reengage in national markets to hire security professionals.
- Institute a long-term practice of

(continued on page 7)

(continued on page 6)

Infrastructure Update New Construction Funding Tool Works at LLNL

A new cafeteria for employees at Lawrence Livermore National Laboratory (LLNL) in California is Livermore's first and largest project using Institutional General Plant Project (IGPP) funding.

IGPP is a funding mechanism approved in 2002 by NNSA for general construction projects of less than \$5 million at multi-program sites.

Prior to IGPP funding, it was difficult to support a general purpose project like the cafeteria because it was not linked to a specific program and program sponsor.

John Bernier of DOE's Office of Infrastructure and Facilities Management said LLNL's "huge success" has paved the way for other GPP projects throughout the complex. "These projects are intended to provide quality-of-life improvements," Bernier said, "and I can't think of a better facility to accomplish that goal."

The 16,000-square-foot building replaces a 25-year-old temporary

facility that no longer met the food services needs of customers in LLNL's expanding northeast quadrant.

The new Café nearly doubled the serving capacity and can handle twice the number of daily lunches (from 700 to 1200). The Café offers higher quality food service options giving employees more choices on site.

The facility can also be used for meetings and other employee gatherings during non-meal time hours.

Key members of the project team include the design-build construction contractor W. E. Lyons Construction Co.; the food services contractor Eurest Dining Services; the Livermore Site Office's federal project director



FAST TRACK FOOD FACILITY: A new cafeteria at Lawrence Livermore National Laboratory was constructed with the use of a new funding mechanism.

Anita Schinnerl-Martin; LLNL's project manager Barbara Pulliam; construction manager Jim Leimbach; Stu Jossey, Michelle Quick, Rich Reiser, Lara Page and Ken Chelini of the business services food management group; and Eileen Nasto and Jan Randolph of the procurement department.



Pollution Prevention Awards at Los Alamos

Administrator Linton Brooks (left) congratulates Lynne Goodwin and Kim McMurry (right) of Los Alamos National Laboratory's Genomic Sequencing and Computational Biology organization at a NNSA Pollution Prevention Awards ceremony at the laboratory. Next to Brooks is laboratory Director G. Peter Nanos. Two laboratory projects received 2004 NNSA Pollution Prevention Best-in-Class awards. The selected projects were "Formamide Replacement in Genetic Sequencing" by Goodwin and her team in B Division and "Pollution Prevention at the Heavy Equipment Maintenance Shop" by a team from KSL Services.

Safeguards and Security Standdown at Sandia Results in Recommendations to Reduce Risks

Security changes designed to raise workforce awareness are on their way to Sandia National Laboratories (SNL), most as a result of the November 2003 Safeguards and Security Standdown at the New Mexico and California labs.

A 34-page report by a special team has been delivered to labs President C. Paul Robinson, who concurred with the results. The report identifies concerns Sandians cited during the standdown and offers short- and long-term solutions to reduce potential security risks. Consolidated comments and questions from staff members are included.

“I am pleased with the report and recommendations it contains,” said Sandia Chief Security Officer Ron Detry. “It shows the thoroughness and thoughtfulness people gave during the standdown and that security is back in the consciousness of Sandians.”

Some 11,500 people, including employees, contractors and consultants, received at least 16 hours of security-related training last November. All divisions submitted consolidated standdown reports that

were analyzed using data-mining software.

Terri Lovato, a safeguards and security manager, says most comments from employees focused on five areas of concern: access control, foreign interactions, prohibited articles, protection of classified and telecommunications. These concerns in most cases correspond to areas where the workforce experienced security incidents or infractions.

“Some of these concerns are being addressed with simple fixes,” Lovato said. “Others will take a while as we identify long-term actions.”

One of the first changes made increases security police officer presence at entrances to security areas. There they can identify prohibited items before they reach the limited area.

Coming soon will be a telephone hotline that will connect callers who have security questions to individuals who can quickly provide answers to their questions or will answer questions directly from a database of frequently asked questions.

Other security-related initiatives planned for the near future include:

- Implementing a corporate

approach to security as opposed to a site approach.

- Improving corporate process requirements to make them easier to read.
- Explaining security changes as they occur and communicating the reasons for the requirements.
- Improving training by providing an initial security briefing, a comprehensive security briefing and an annual security refresher briefing for personnel with security duties.
- Investigating technology equipment that can be used to stop people from accidentally bringing their cell phones into limited areas. An evaluation is underway for a cell phone detection capability that should be ready for testing by the end of the fiscal year.

“The goal of each of these initiatives is to make it easy for people to do the right thing and difficult to do the wrong thing in the area of security,” Lovato said.

Security Workforce Study

(continued from page 4)

- security staff rotation.
- Identify options for accelerating the security clearance process.
- Improve security information flow.
- Revise the NNSA Safeguards and Security Strategic Plan.

- Provide specific budget support and track recommendation progress.

Brooks has established a human resource implementation team to develop within 90 days “a comprehensive human capital management program” to address both short- and long-term issues raised in the report. The team will be under the

joint leadership of Michael Kane, NNSA’s associate administrator for management and administration, and William Desmond, acting chief of defense nuclear security.

Got an article for the NNSA Newsletter? Submit it to AStotts@doeal.gov

Deputy Energy Secretary McSlarrow Visits LANL

In a recent visit to Los Alamos National Laboratory, Deputy Secretary of Energy Kyle McSlarrow talked to Los Alamos National Laboratory employees, offering congratulations to the staff for “a job well done.” The deputy secretary acknowledged the scientific excellence of the laboratory’s heritage in the Manhattan Project and said the laboratory has maintained its scientific and technical prestige by admirably adapting to the new threats of the 21st century as a central part of the

laboratory’s mission.

Regarding the upcoming competition for the laboratory’s prime management and operation contract, McSlarrow said the DOE would, regardless of the outcome of the competition, protect the mission of the laboratory and protect employees and their salaries and benefits as well. The scientific character of the institution won’t change, regardless of the outcome of the contract, McSlarrow said.



LASO MANAGER: Ralph Erickson (center) outgoing NNSA Los Alamos Site Office manager, talks with Imelda Tainter (right) executive assistant to Ed Wilmot, and Dan Glenn of the NNSA’s Pantex Site Office at a change of command and retirement ceremony at the Los Alamos Site Office. Wilmot replaces Erickson, who is retiring.

SNL Employee Work With Rural Communities

(continued from page 4)

community are of Mayan decent. At first glance, she said, you notice their shiny teeth, which are a source of pride. Their teeth are inlaid with shapes like stars and moons. Their speech is deliberate so as to show their teeth. Waxabaja’s main sources of income are cardamom and coffee, grown on the mountain sides.

“Todo lo que sube tiene que bajar” (everything that goes up has to come down), Debora said, “and so did we. The fact that it rained while we were there made me wonder how we were going to do it. I had visions of sliding down the muddy mountain. Getting back was uneventful until I spotted a snake. Hysteria kicking in, I reached the truck 20 to 30 minutes ahead of everyone. Adrenalin works.”

Debora said she gets a great deal of personal satisfaction from her work.

“It is not only in providing the energy to the communities, but in teaching and working with the people as they learn to adjust, manage and adopt this new means to accomplish their daily activities,” she said. “It’s the technical effort teamed with the human element that makes this whole endeavor sustainable.”

As a student intern, Debora supported Sandia’s Mexico Renewable Energy Program and worked with the solar energy group. She got accepted into the one-year-on-campus program and earned her graduate degree at the University of Colorado at Boulder. For her master’s final report she did an energy and water assessment of the Galápagos Islands, off Ecuador’s coast.

NNSA News is published monthly by the Office of Congressional, Intergovernmental and Public Affairs, C. Anson Franklin, Director.

Editors: Al Stotts and Bryan Wilkes

Layout: Barbara L. Courtney

Contributors include: Iris Aboytes, Sandia Labs; Jim Danneskiold, Los Alamos Lab; John German III, Sandia Labs; James Giuisti, DOE Savannah River; Wess Hudelson, Kansas City Plant; Susan Johnson, NNSA Service Center; Kim Krueger, NNSA HQ; Randy Montoya, Sandia Labs; Larry Perrine, Sandia Labs; Michael Volpe, NNSA HQ; Gordon Yano, Lawrence Livermore Lab

KCP Trailer Production Reaches Safety Milestone

Modification and refurbishment of specialized trailers for the safe and secure transport of nuclear materials by NNSA is conducted by the Kansas City Plant's trailer production department. The group has now surpassed one year without an Occupational Safety and Health Administration (OSHA) recordable injury.

Transport fabricator John Vincent struggled to remember a specific time he intervened after seeing a potentially dangerous situation in the trailer production area where he works.

"You know, I don't remember any one particular incident. I've intervened so many times. It's just something we do," Vincent said.

It's the way the entire department goes about its business everyday. Safety intervention is expected, particularly when associates are routinely exposed to a hazardous working environment. Trailer production involves heavy lifting, sharp objects, awkward ergonomic positions, extensive power-tool usage and overhead work, just to name a few.

"We really make an effort to be aware of safety in everything we do," Bailey said. "No one can make it one year without an injury by themselves. We all work as a team to finish the work and we all work together to stay safe. Unless everyone is involved, it doesn't work. It has to be a team environment."

The concept of integrating safety into all aspects of the business also plays an important role.

"We've really changed the way we approach everything from a safety standpoint in the last year," Jerry

McWilliams, operations team manager, said. "Before we would look at a tool catalog and just consider the price and quantity. Now we look at tools and think about how they can make work safer.

equipment improvements made by the department. Other simple upgrades included: kneeling pads, cut-proof gloves, soft-foam handle grips to absorb vibrations from power tools, self-drilling devices

that apply pressure to fasteners rather than requiring the operator to do so, and redesigned aluminum plates that weigh half as much as the old ones used in the construction of trailers.

"All of these improvements are spearheaded by the people doing the work on the factory floor. It's not something pushed down by managers," Tim Reno, engineering manager, said. "We conduct weekly meetings specifically to address safety topics. If we don't have any topics to discuss that week,

then we talk about how what we've learned at work can be carried over to home."

The weekly meetings provide an open forum for all associates in the department to voice their opinions about safety and address progress on eliminating previous concerns.

The meetings play a small part of a safety routine that includes 20-minute stretching sessions twice per day to help reduce strains and sprains, and monthly safety tours of specific areas to look for opportunities for improvement.



SPECIALIZED TRAILERS: A pair of associates install insulation on a trailer at the Kansas City Plant. The trailer department recently reached one year without an OSHA-recordable injury.

"We started looking at how the tool grips were made and how much the tool weighs. We bought lighter rivet guns last year that significantly eased the amount of strain on associates using them, and actually increased the speed of production, because they didn't have to lug a heavy tool around while they were working. It became clear to us that spending a little more on a tool is worth all of the ergonomic benefits."

Trailers need approximately 20,000 rivets before completion, but that's only the beginning of the